



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,791	08/21/2003	Christopher Marrs	NEU-5008	8032

27777 7590 09/21/2005

PHILIP S. JOHNSON  
JOHNSON & JOHNSON  
ONE JOHNSON & JOHNSON PLAZA  
NEW BRUNSWICK, NJ 08933-7003

EXAMINER

LAMM, MARINA

ART UNIT	PAPER NUMBER
----------	--------------

1616

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/645,791

Applicant(s)

MARRS, CHRISTOPHER

Examiner

Marina Lamm

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

Claims 1-21 are pending in this application filed 8/21/03.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12 and 15 are viewed as indefinite because of the recitations "isoascorbic acid derivative" and "tocopherol derivative". It is unclear what derivatives of isoascorbic acid and tocopherol are included in the instant claims. Therefore, the term "derivative" presents uncertainty with respect to the question of scope of the claims.

Claims 13, 14 and 16-21 are rejected as being indefinite because they contain all the limitations of Claim 12 rejected for the reasons given above.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Yarosh (US 6,103,746).

Yarosh teaches compositions, including topical compositions, for protecting mitochondria from oxidative damage, comprising L-ergothioneine and ascorbic acid. See Abstract; col. 3, lines 7-19; col. 4, lines 17-25; col. 5, lines 4-25.

Thus, Yarosh teaches each and every limitation of Claims 1, 2 and 4.

5. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Mohammadi (US 6,039,935).

Mohammadi teaches cosmetic sunscreen compositions containing ergothioneine in combination with tocopherol acetate and retinyl palmitate. See Examples in Table II.

Thus, Mohammadi teaches each and every limitation of Claims 1, 2 and 5.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3, 8-12 and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Yanagida et al. (US 5,484,816) or Stahl et al. (US 6,468,552) in view of Kim et al. (KR 2001070531 A, Abstract<sup>1</sup>).

a. Yanagida et al. in view of Abstract of KR 2001070531 A.

---

<sup>1</sup> translation of this document is not currently available, but will be made of record when received by the Examiner.

Art Unit: 1616

Yanagida et al. teach external skin preparations comprising vitamin A (retinol), tocopherol, ascorbic acid and/or isoascorbic acid or a salt thereof. See col. 27-28, Examples 7-5, 7-7, 7-8 and 7-9. Yanagida et al. do not teach *Phellinus Linteus* extract of the instant claims. However, Kim et al. teach using *Phellinus Linteus* extract as an anti-oxidant for skin aging prevention and other beneficial skin effects. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cosmetic compositions of Yanagida et al. such that to employ *Phellinus Linteus* extract. One having ordinary skill in the art would have been motivated to do this to obtain an additional anti-oxidant/anti-skin aging effect as suggested by Kim et al. The determination of optimal or workable concentration of *Phellinus Linteus* extract by routine experimentation is obvious absent showing of criticality of the claimed concentration. One having ordinary skill in the art would have been motivated to do this to obtain the desired anti-oxidant/anti-aging properties of the composition.

b. Stahl et al. in view of Abstract of KR 2001070531 A.

Stahl et al. teach cosmetic compositions for treating skin disorders such as hyperpigmentation, age spots, wrinkles, fine lines and other visible signs of skin aging, comprising (a) an oxygen labile active agent such as retinol, ascorbic acid, tocotrienol, hydroquinone, ubiquinone and dihydrolipoic acid, in an amount of 0.001-20%; (b) 0.05-0.5% of erythroic acid (isoascorbic acid) or a salt or ester thereof, (c) 0.001-1% of a tocopherol derivative, and other cosmetic agents. See Abstract; col. 1, lines 66-67; col.

Art Unit: 1616

2, lines 1-46; col. 4, lines 51-54; Examples. Stahl et al. do not teach *Phellinus Linteus* extract of the instant claims. However, Kim et al. teach using *Phellinus Linteus* extract as an anti-oxidant for skin aging prevention and other beneficial skin effects, such as improving skin color, freckles and liver spots by prevention of skin pigmentation or color deposition. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cosmetic compositions of Stahl et al. such that to employ *Phellinus Linteus* extract. One having ordinary skill in the art would have been motivated to do this to obtain skin-whitening and anti-skin aging effects as suggested by Kim et al. The determination of optimal or workable concentration of *Phellinus Linteus* extract by routine experimentation is obvious absent showing of criticality of the claimed concentration. One having ordinary skill in the art would have been motivated to do this to obtain the desired skin-whitening and anti-skin aging properties of the composition.

8. Claims 1, 2, 4-7, 12, 13 and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Yanagida et al. (US 5,484,816) or Stahl et al. (US 6,468,552) in view of either Yarosh (US 6,103,746) or Catroux et al. (WO 01/87260 as translated by US 2004/0047823).

Yanagida et al. or Stahl et al. applied as above. Neither reference teaches ergothioneine of the instant claims. However, Yarosh teaches using L-ergothioneine in topical compositions for protecting mitochondria from oxidative damage due to exposure to sunlight and environmental toxins as discussed above. Similarly, Catroux et

Art Unit: 1616

al. teach using ergothioneine as anti-pollution agent that protects the skin and keratin materials from deleterious effects of oxidizing agents, including UV radiation and ozone. See [0001]-[0019]; Examples. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cosmetic compositions of either Yanagida et al. or Stahl et al. such that to employ ergothioneine. One having ordinary skill in the art would have been motivated to do this to obtain anti-oxidant skin-protective effect as suggested by either Yarosh or Catroux et al.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,438,151; US 5,652,263; US 5,728,373; US 6,080,393; US 6,235,721; US 6,416,768; US 6,544,532; US 6,759,049; US 6,805,866; US 6,809,084; US 2002/0110604; US 2004/0029955; KR 2001084853 A (Abstract); JP 2002235084 A (Abstract); KR 2002084619 A (Abstract); Akanmu et al. "The Antioxidant Action of Ergothioneine", Archives of Biochemistry and Biophysics, Vol. 288, No. 1, July 1991, pp. 10-16.

10. No claim is allowed at this time.

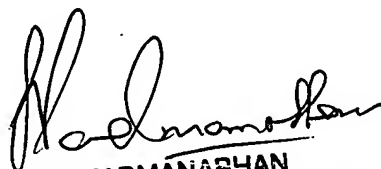
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Lamm whose telephone number is (571) 272-0618. The examiner can normally be reached on Mon-Fri from 11am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, can be reached at (571) 272-0887.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ml  
9/17/05

  
SREENI PADMANABHAN  
SUPERVISORY PATENT EXAMINER